

United States Patent and Trademark Office

UNITED STATES DEPAREMENT OF COMMERCE United States Patent and Trademark Office Address: COMMESSONER FOR PATENTS P.O. BOX 1/50 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,607	05/23/2001	Peter J. Brittenham	RSW920010106US1	3651
7590 06/20/2006			EXAM	INER
Jeanine S. Ray-Yarletts		COFFY, EMMANUEL		
IBM Corporation	on T81/503			D + DED > W + DED
PO Box 12195			ART UNIT	PAPER NUMBER
Research Triangle Park, NC 27709			2157	
			DATE MAILED: 06/20/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/864,607	BRITTENHAM ET AL.			
		Examiner	Art Unit			
		Emmanuel Coffy	2157			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 30 M	arch 2006.				
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)🖾	4) Claim(s) <u>25-51</u> is/are pending in the application.					
	4a) Of the above claim(s) 1-24,27,49 and 51 is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
•	DIX Claim(s) <u>25-51</u> is/are rejected.					
•	Claim(s) is/are objected to.					
8)[Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers						
9)	The specification is objected to by the Examine	r.				
10)	The drawing(s) filed on is/are: a)☐ acc	epted or b) objected to by the E	Examiner.			
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Art Unit: 2157

Response to Amendment

This action is responsive to the amendment to the claims filed on March 30, 2006.
 Claims 1-24, 27, 49 and 51 are cancelled. Claims 25-51 represent Claims 25-51 are directed to a "Dynamic Undeployment of Services in a Computing Network."

2. The Examiner acknowledges Applicant's amendment to claim 28 in an effort to overcome the double patenting rejection asserted against that claim in the last Office Action. However, based on Applicant's admission of the double patenting rejection and upon further inspection, claim 25 is now the subject of a double patenting rejection. Claim 25 upon which amended claim 28 depends on, incorporates the same limitations as the previous claim 28. Therefore, a new ground of rejection is asserted against claim 25 and any claims, which claims dependency on claim 25. Applicant's arguments are moot in view of the new grounds of rejection and all previous rejections are herein reiterated.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this

application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 25 is rejected under the judicially created doctrine of double patenting over U. S. Patent 6,745,241 since the claim, if allowed, would improperly extend the "right to exclude" sought in above application.

Although the limitations of claim 25 and the disclosure are not identical, they are not patentably distinct from each other because the present claimed invention is somewhat a different recitation of Patent 6,745,241. There is a species/genus relationship between the limitation of claim 28 and the disclosure of '241.

Claim 25 is obvious over the teachings of '241(col. 12, lines 27-33) because this system would allow load balancing across a network.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 25, 48 and 50 are rejected under 35 USC §102(e) as anticipated by Chen (US 6,553,423)

Chen teaches a technique to dynamically exchange or update routing capabilities

between neighboring peer routers in a computer network without disruption to the operation of the routers. (See abstract)

Claim 25:

Chen teaches a method of dynamically undeploying services in a computing network, comprising steps of:

receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)

determining one or more network locations where the selected service is deployed; and

(See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network

locations is inherent.)

effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations. (See col. 6, lines 31-65). (particularly lines 49-55)

wherein services comprise web services; (See col. 3, lines 10-26)(capability is synonymous to service)

wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network; (See col. 5, lines 20-30)

wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network. ((See col. 6, lines 31-65). (particularly lines 49-55). See also col. 3, lines 10-26 (capability is synonymous to service)

Claim 48:

Chen teaches a system for dynamically undeploying services in a computing network, comprising:

means for receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)

means for determining one or more network locations where the selected service is deployed; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

means for effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations. (See col. 6, lines 31-65).(particularly lines 49-55)

wherein services comprise web services; (See col. 3, lines 10-26)(capability is synonymous to service)

wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network; <u>See col. 5, lines 20-30</u>)

wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network. (See col. 6, lines 31-65). (particularly lines 49-55). See also col. 3, lines 10-26 (capability is synonymous to service)

Claim 50:

Chen teaches a computer program product for dynamically undeploying services in a computing network, the computer program product embodied on one or more computer-readable media and comprising: (See col. 8, claim 16)

computer-readable program code means for receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)

computer-readable program code means for determining one or more network locations where the selected service is deployed; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

computer-readable program code means for effecting a dynamic undeployment by programmatically removing the selected service from one cr more selected ones of the network locations. (See col. 6, lines 31-65).(particularly lines 49-55)

wherein services comprise web services; (See col. 3, lines 10-26)(capability is synonymous to service)

wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network; (See col. 3, lines 10-26)(capability is synonymous to service)

wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network. (See col. 6, lines 31-

Art Unit: 2157

65).(particularly lines 49-55). See also col. 3, lines 10-26 (capability is synonymous to service)

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 26 and 32, 35-39 and 45-47 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (US 6,553,423) in view of Khello (US 5,657,451).

Chen teaches a technique to dynamically exchange or update routing capabilities between neighboring peer routers in a computer network without disruption to the operation of the routers. (See abstract)

Claim 26:

Chen substantially teaches the invention including the method according to claim 25 as discussed above further comprising the steps of:

receiving client requests for the selected service; and ;(See col. 5, lines 20-30)

Chen is silent as to "continuing to serve the received requests from the network locations other than the one or more selected ones from which the selected service was programmatically removed." However Khello does. (See col. 6, lines 30-43). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen with the internetworking system disclosed by Khello. Such system would provide an ultimate method of handling the service interaction problem.

Art Unit: 2157

Claim 32:

Chen teaches the invention substantially as claimed including the method according to claim 31, Chen is silent as to "wherein the usage is an average number of client requests for the selected service within a predetermined time interval." However, Khello does. (See col. 6, lines 1-3).

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. Such system would allow accurate billing.

Claim 35:

Chen teaches the invention substantially as claimed including the method according to claim 33 as discussed above, Chen is silent as to "wherein a value of the predetermined threshold applies to a plurality of deployed services." However, Khello does. (See col. 5, lines 52-54). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 36:

Chen teaches the invention substantially as claimed including the method according to claim 33 as discussed above, Chen is silent as to "wherein the predetermined threshold applies individually to the selected service." However, Khello does. (See col. 5, lines 52-54). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 37:

Chen teaches the invention substantially as claimed including the method according to claim 33 as discussed above; Chen is silent as to "wherein a value of the predetermined threshold applies to all of the network locations." However, Khello does. (See col. 5, lines 52-54 and lines 22-26.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 38:

Chen teaches the invention substantially as claimed including the method according to claim 33 discussed above; Chen is silent as to "wherein a value of the predetermined threshold applies to the one or more selected ones of the network locations." However, Khello does. (See col. 5, lines 52-58.)(service restriction only applies to a certain location). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 39:

Chen teaches the invention substantially as claimed including the method according to claim 33 discussed above; Chen is silent as to "wherein a value of the predetermined threshold is initially set when the selected service is deployed." However, Khello does. (See col. 14, lines 35-51.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Art Unit: 2157

Claim 45:

Chen teaches the invention substantially as claimed including the method according to claim 33 as discussed above; Chen does not specifically teach "wherein the programmatically removing step further comprises the step of issuing an undeployment request for the selected service to the one or more selected ones." However, Khello does. (See col. 8, lines 54-67.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 46:

Chen teaches the invention substantially as claimed including further comprising: receiving the undeployment request at a particular one of the network locations, the particular one being the selected one of the network locations from which the selected service is being dynamically undeployed; and (See col. 5, lines 7-30) (once the paths are calculated it follows then that determining network locations is inherent.) Chen is silent as to "shutting down the selected service at the particular one, responsive to the receiving step, and removing executed code which implements the selected service from a run-time environment of the particular one." However, Khello does. (See col. 16, lines 45-65.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

Claim 47:

Chen teaches the invention substantially as claimed including the method according to claim 46 as discussed abobe; Chen is silent as to "further comprising the step of making the selected

service unlocatable from a routing system."

However, Khello does. (See col. 16, lines 45-65)(when the state of the service is set to "BARRED" it is then unlocatable from a routing system.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

9. Claims 29, and 33-34, and 40-44 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (US 6,553,423) in view of Khello (US 5,657,451) in further view of Reifer et al. (US 6,421,727).

Claim 29:

Chen and Khello teach the invention substantially as claimed including the method according to claim 25 as discussed above; Chen and Khello are silent as to "wherein the undeployment trigger is an undeployment request issued by an origin server from which the selected service was initially deployed."

However, Reifer teaches an origin server requesting service activation. (See abstract). Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the internetworking system disclosed by Reifer. There is a need to identify the server which server is requesting service removal.

<u>Claim 33</u>:

Chen and Khello teach the invention substantially as claimed including the method according to claim 31 as discussed above; Chen and Khello do not explicitly disclose "further comprising comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls

below the predetermined threshold."

However, Reifer teaches usage comparison at col. 5, lines 13-16. Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage comparison disclosed by Reifer because this feature would allow load balancing across a network.

Claim 34:

Chen and Khello teach the method according to claim 33 as discussed above, Chen and Khello do not explicitly disclose "wherein a value of the predetermined threshold may be modified over time." It is implicit that a threshold value in a network system may be modified over time based on the usage reports. (See Reifer, col. 6, lines 55-60.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage comparison disclosed by Reifer because this feature would allow load balancing across a network.

Claim 40:

Chen and Khello teach the invention substantially as claimed including the method according to claim 33 as discussed above; Chen and Khello do not specifically teach "further comprising the step of obtaining the usage at periodic intervals for use when comparing the usage of the selected service to a predetermined threshold."

However, Reifer explicitly teaches usage reports capturing monthly system activity. (see col. 6, lines 55-65.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen Khello with the network's usage information disclosed by Reifer. Usage is synonymous with load because this feature would allow load balancing across a network.

Art Unit: 2157

Claim 41:

Chen and Khello teach the invention substantially as claimed including the method according to claim 40 as discussed above; Chen and Khello do not specifically disclose "wherein the obtaining step obtains the usage from all of the network locations."

However, Reifer explicitly teaches usage reports capturing monthly system activity. (see col. 6, lines 55-65.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage information disclosed by Reifer. Usage is synonymous with load. This feature would allow load balancing across a network.

Claim 42:

Chen and Khello teach the invention substantially as claimed including the method according to claim 41 as discussed above; Chen and Khello do cot specifically disclose "wherein the obtaining step obtains the usage from representative ones of the network locations."

However, Reifer explicitly teaches usage reports capturing monthly system activity. (see col. 6, lines 55-65.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage information disclosed by Reifer. Usage is synonymous with load. This feature would allow load balancing across a network.

<u>Claim 43</u>:

Chen and Khello teach the invention substantially as claimed including the method according to claim 41 as discussed above; Chen and Khello do not specifically disclose

"wherein the programmatically removing occurs at a particular one of the network locations, and wherein the obtaining step obtains the usage from the particular one."

However, Reifer explicitly teaches usage reports capturing monthly system activity. (See col. 6, lines 55-65.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage information disclosed by Reifer. This feature would allow charges to be posted for the particular client by providing usage information at the time of service removal.

Claim 44:

Chen and Khello teach the invention substantially as claimed including the method according to claim 25as discussed above; Chen and Khello do not specifically disclose "further comprising the steps of: monitoring a load on the computing network; and triggering the dynamic undeployment when the monitored load meets a predetermined threshold."

Khello teaches a predetermined threshold (col. 5, lines 51-54) and Khello teaches the removal of a particular service (col. 8, lines 54-57). However, Reifer explicitly teaches usage reports capturing monthly system activity. (See col. 6, lines 55-65.) (usage implies monitor – usage cannot be determined without monitoring.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and Khello with the network's usage information disclosed by Reifer. This feature would allow charges to be posted for the particular client by providing usage information at the time of service removal.

Art Unit: 2157

10. Claims 25, 28 and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chen et al. (US 6,553,423) in view of Ogle et al. (US 5, 983, 281).

Claim 25:

Chen substantially teaches the method according to claim 25 as discussed above. Chen is silent as to "wherein the undeployment trigger is based upon network load at the network locations." However, Ogle does throughout. See Fig. 2., Fig. 3, abstract, col. 6, lines 1-67; particularly lines 37-44.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen with the network's loading configuration disclosed by Ogle. This feature would allow load balancing across a network.

Claim 28:

Chen substantially teaches a method of dynamically undeploying services in a computing network, the method comprising:

receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)

determining one or more network locations where the selected service is deployed; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations. (See col. 6, lines 31-65). (particularly lines 49-55)

Chen is silent as to "wherein the undeployment trigger is based upon network load at the network locations." However, Ogle does throughout. See Fig. 2., Fig. 3, abstract, col. 6, lines 1-67; particularly lines 37-44.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary

Art Unit: 2157

skill in the art to combine the system taught by Chen with the network's loading configuration disclosed by Ogle. This feature would allow load balancing across a network.

Claim 31

Chen substantially teach the method according to claim 25 as discussed above; Chen is silent as to "wherein the undeployment trigger is based upon usage of the selected service at the network locations."

However, Ogle does throughout. See Fig. 2., Fig. 3, abstract, col. 6, lines 1-67; particularly lines 37-44. (Usage is synonymous with load. This feature would allow load balancing across a network.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen with the network's loading configuration disclosed by Ogle. This feature would allow load balancing across a network.

11. Claim 30 is rejected under 35 U.S.C. §103(a) as being unpatentable over Khello (US 5,657,451) in view of Reifer et al. (US 6,421,727) in further view of Chen et al. (US 6,553,423). Claim 30:

Chen substantially teaches a method of dynamically undeploying services in a computing network, the method comprising:

receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)

determining one or more network locations where the selected service is deployed; and (See col. 5, lines 7-24) (once the paths are calculated it follows then that determining network locations is inherent.)

effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations. (See col. 6, lines 31-65). (particularly lines 49-55)

Art Unit: 2157

Chen does not specifically disclose the following limitations. However, Khello does. "sending the undeployment request to all of the network locations; (see col. 8, lines 54-67.)

shutting down the selected service at the network locations, responsive to the receiving step, and removing executed code which implements the selected service from a run-time environment of each network location; (see col. 8, line 54-col. 9, line 67.)

shutting down the selected service at the origin server; and, responsive to the receiving step, and removing executed code which implements the selected service from a run-time environment of each network location; and (see col. 8, line 54-col. 9, line 67.)

making the selected service unlocatable in the computing network." (See col. 16, lines 45-65)(when the state of the service is set to "BARRED" it is then unlocatable from a routing system.) Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen and with the internetworking system disclosed by Khello. This system would serve the need to identify the server, which is requesting service removal.

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Helland et al. (U.S. 6,631,425) teaches "Just-In-Time Activation And As-soon-As-Possible Deactivatiob Or Server Application Conponents."
 - Aahlad (U.S. 5,907,675) teaches "Methods and Apparatus For Managing Deactivation And Shutdown of a Server."

Application/Control Number: 09/864,607

Art Unit: 2157

CONCLUSION

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Emmanuel Coffy whose telephone number is (571) 272-3997.

The examiner can normally be reached on 8:30 - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Ario Etienne can be reached on (571) 272-3997. The fax phone number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Coffy Patent Examiner, Art Unit 2157 Page 18

EC

June 9, 2006

SUPERVISORY PATENT EXAMINER